

IN THE CLAIMS:

Please amend Claims 29 and 33 as follows. The claims, as pending in the subject application, read as follows:

1. (Previously Presented) A network device managing apparatus for managing a network to which a device which broadcasts a network managing packet at least once after activation is connected, comprising:

packet receiving means for receiving a broadcast packet which is broadcast from the device when the device is activated;

packet determining means for determining whether the broadcast packet received by said packet receiving means is a network managing packet;

device address acquiring means for acquiring from the broadcast packet an address of the device which has transmitted the broadcast packet, if said packet determining means determines that the broadcast packet is a network managing packet; and

device address registering means for registering the device address acquired by the device address acquiring means.

2. (Previously Presented) The apparatus according to Claim 1, further comprising transmitting means for transmitting, to said device having the address acquired by said device address acquiring means, a verify packet for verifying that said device is a predetermined type of device, and

if a response indicating that said device is a predetermined type of device is returned as a response to the verify packet, said device address registering means registers the status of said device which has returned the response together with the address.

3. (Previously Presented) The apparatus according to Claim 2, wherein, the response to the verify packet contains information indicating the operating status of said device.

4. (Previously Presented) The apparatus according to Claim 2, wherein, the verify packet is a packet for acquiring the status of a printer, and, if a response indicating that said device is a printer is returned as a response to the verify packet, said device address registering means registers the address of said device and information indicating that said device is a printer.

5. (Previously Presented) The apparatus according to Claim 1, further comprising display control means for controlling a display unit to display the address of said device registered by said device address registering means.

6. (Previously Presented) The apparatus according to Claim 2, further comprising display control means for controlling a display unit to display the address of said device registered by said device address registering means together with the status of said device.

7. (Previously Presented) A network system comprising:

a network device for broadcasting a network managing packet at least once after activation;

a device information server for storing information concerning a device connected to a network; and

a network device managing apparatus, comprising:

packet receiving means for receiving a broadcast packet which is broadcast from the network device when the network device is activated;

packet determining means for determining whether the broadcast packet received by said packet receiving means is a network managing packet;

device address acquiring means for acquiring from the broadcast packet the address of the network device which has transmitted the broadcast packet, if said packet determining means determines that the broadcast packet is a network managing packet; and

device address registering means for registering the device address acquired by the device address acquiring means in said device information server.

8. (Previously Presented) The system according to Claim 7, wherein, said network device managing apparatus further comprises transmitting means for transmitting, to said network device having the address acquired by said device address acquiring means, a verify packet for verifying that said network device is an object of monitoring, and

if a response indicating that said network device is an object of monitoring is returned as a response to the verify packet, said device address registering means registers the status of said network device which has returned the response together with the address.

9. (Previously Presented) The system according to Claim 8, wherein, the response to the verify packet contains information indicating the operating status of said network device.

10. (Previously Presented) The system according to Claim 8, wherein, the verify packet is a packet for acquiring the status of a printer, and, if a response indicating that said network device is a printer is returned as a response to the verify packet, said address registering means registers the address of said network device as a source of response and information indicating that said network device is a printer.

11. (Previously Presented) The system according to Claim 7, further comprising display means for displaying the address of said network device registered by said address registering means.

12. (Previously Presented) The system according to Claim 8, further comprising display means for displaying the address of said network device registered by said address registering means together with the status of said network device.

13. (Previously Presented) A network device managing method of managing a network to which a device which broadcasts a network managing packet at least once after activation is connected, comprising the steps of:

a packet receiving step of receiving a broadcast packet which is broadcast from

the device when the device is activated;

a packet determining step of determining whether the broadcast packet received in said packet receiving step is a network managing packet;

a device address acquiring step of acquiring from the broadcast packet the address of a device which has transmitted the broadcast packet, if said packet determining step determines that the packet is a network managing packet; and

a device address registering step of registering the device address acquired by the device address acquiring step.

14. (Previously Presented) The method according to Claim 13, further comprising a transmitting step of transmitting, to said device having the address acquired in said device address acquiring step, a verify packet for verifying that said device is an object of monitoring, and

if a response indicating that said device is an object of monitoring is returned as a response to the verify packet, said device address registering step comprises registering the status of said device which has returned the response together with the address.

15. (Previously Presented) The method according to Claim 14, wherein, the response to the verify packet contains information indicating the operating status of said device.

16. (Previously Presented) The method according to Claim 14, wherein, said verify packet is a packet for acquiring the status of a printer, and, if a response indicating that

said device is a printer is returned as a response to the verify packet, said address registering step comprises registering the address of said device as a source of response and information indicating that said device is a printer.

17. (Previously Presented) The method according to Claim 13, further comprising a display step of displaying the address of said device registered in said address registering step.

18. (Previously Presented) The method according to Claim 14, further comprising a display step of displaying the address of said device registered in said address registering step together with the status of said device.

19. (Previously Presented) A computer-readable storage medium storing a computer program for implementing the network device managing method according to Claim 13 by a computer.

20. (Previously Presented) The apparatus according to Claim 1, wherein, said device address registering means registers the device address in an external managing apparatus connected via the network.

21. (Previously Presented) The apparatus according to Claim 1, further comprising device address transmitting means for transmitting the address of said device

registered by said device address registering means to an external client apparatus connected via the network.

22. (Previously Presented) The apparatus according to Claim 1, wherein, the network managing packet is an SNMP trap packet.

23. (Previously Presented) A network device managing apparatus for managing a network to which a device which broadcasts a network managing packet at least one after activation is connected, comprising:

a network interface circuit; and

a trap monitor for (i) receiving, via the network interface circuit, a broadcast packet which is broadcast from the device when the device is activated, (ii) determining whether the broadcast packet received by said network interface circuit is a network managing packet, (iii) acquiring from the broadcast packet the address of the device which has transmitted the broadcast packet if it is determined that the broadcast packet is a network managing packet, and (iv) registering the acquired device address.

24. (Previously Presented) A network device managing apparatus for managing a network to which a device which broadcasts a network managing packet at least once after activation is connected, comprising:

packet recognizing means for recognizing a broadcast packet received from the network;

packet determining means for determining whether the broadcast packet recognized by said packet recognizing means is a network managing packet;

device address acquiring means for acquiring from the broadcast packet the address of the device which has transmitted the broadcast packet if said packet determining means determines that the broadcast packet is a network managing packet; and

device address registering means for registering the acquired device address to an external managing apparatus on the network.

25. (Previously Presented) The apparatus according to Claim 24, wherein said device address registering means registers the device address to said external managing apparatus which is implemented in accordance with Lightweight Directory Access Protocol.

26. (Previously Presented) A network device managing apparatus for managing a network to which a device which broadcasts a network managing packet at least once after activation is connected, comprising:

a network interface circuit; and

a trap monitor for (i) recognizing a broadcast packet received from the network via the network interface circuit, (ii) determining whether the broadcast packet received by said network interface circuit is a network managing packet, (iii) acquiring from the broadcast packet the address of the device which has transmitted the broadcast packet if it is determined that the broadcast packet is a network managing packet, and (iv) registering the device address to an external managing apparatus on the network.



27. (Previously Presented) A network device managing apparatus for managing a network to which a device which broadcasts a network managing packet at least once after activation is connected, comprising:

packet receiving means for receiving a broadcast packet which is broadcast from the device when the device is activated;

packet determining means for determining whether the broadcast packet received by said packet receiving means is a predetermined trap packet which is defined to notify of participation of the device on the network to the network managing device;

device information acquiring means for acquiring, from the broadcast packet, device identification information including an address of the device which has transmitted the broadcast packet if said packet determining means determines that the broadcast packet is the predetermined trap packet which notifies of the participation of the network device; and

device information registering means for registering the device identification information acquired by the device information acquiring means.

28. (Previously Presented) An apparatus according to claim 27, wherein the predetermined trap packet is a trap packet defined by Simple Network Management Protocol.

29. (Currently Amended) An apparatus according to claim 27, said device information registering means ~~exists in~~ registers the device identification information acquired by acquiring means to an external server apparatus.

30. (Previously Presented) An apparatus according to claim 29, wherein the external server apparatus has a data base and device information registering means which registers the device address acquired by the device information acquiring means to the data base in accordance with a Light Weight Discovery Protocol.

31. (Previously Presented) A network device managing method for managing a network to which a device which broadcasts a network managing packet at least once after activation is connected, comprising:

a packet receiving step of receiving a broadcast packet which is broadcast from the device when the device is activated;

a packet determining step of determining whether the broadcast packet received in said packet receiving step is a predetermined trap packet which is defined to notify of participation of the device on the network to the network managing device;

a device information acquiring step of acquiring, from the broadcast packet, device identification information including an address of the device which has transmitted the broadcast packet if it is determined in said packet determining step that the broadcast packet is the predetermined trap packet which notifies of the participation of the network device; and

a device information registering step of registering the device identification information acquired in the device information acquiring step.

32. (Previously Presented) A method according to claim 31, wherein the predetermined trap packet is a trap packet defined by Simple Network Management Protocol.

33. (Currently Amended) A method according to claim 31, wherein said device information registering step ~~is performed in~~ registers the device identification information acquired by acquiring means to an external server apparatus.

34. (Previously Presented) A method according to claim 33, wherein the external server apparatus has a data base and further performs a device information registering step of registering the device address acquired in the device information acquiring step to the data base in accordance with a Light Weight Discovery Protocol.

35. (Previously Presented) A network device managing apparatus for managing a network to which a device which broadcasts a network managing packet at least once after activation is connected, comprising:

a packet receiving unit adapted to receive a broadcast packet which is broadcast from the device when the device is activated;

a packet determining unit adapted to determine whether the broadcast packet received by said packet receiving unit is a predetermined trap packet which is defined to notify of participation of the network device on the network to the network managing device;

a device information acquiring unit adapted to acquire, from the broadcast packet, device identification information including an address of the device which has transmitted the broadcast packet if said packet determining unit determines that the broadcast packet is the predetermined trap packet which notifies of the participation of the network device;  
and

a device information registering unit adapted to register the device identification information acquired by said device information acquiring unit.